

CLAIMS

1. A polyurethane hot melt adhesive composition comprising an isocyanate, from about 10 to about 60% of at least one substantially non-crystalline polyol, and from about 1 to about 30% of a functional acrylic polymer, and which comprises not more than about 10% of a substantially crystalline polyol.

2. The adhesive of claim 1 wherein said at least one non-crystalline polyol is a polyether polyol.

3. The adhesive of claim 2 wherein said at least one non-crystalline polyol comprises from about 10 to about 60% of a polyether, up to about 40% of an aromatic polyester, up to about 40% of an aliphatic polyester, and up to about 40% of a polybutadiene.

4. The adhesive of claim 3 further comprising a crystalline polyester.

5. The adhesive of claim 1 further comprising a non-functional acrylic.

6. The adhesive of claim 5 which comprises up to about 50% of said non-functional acrylic.

7. The adhesive of claim 1 wherein said functional acrylic polymer is a hydroxyl functional polymer.

8. A method of improving the green strength of a polyurethane hot melt adhesive comprising adding from about 10 to about 60% of at least one substantially non-crystalline polyol to an adhesive composition which comprises from about 1 to about 30% of a functional acrylic polymer, and which comprises not more than about 10% of a substantially crystalline polyol.

9. The method of claim 8 wherein said at least one non-crystalline polyol is a polyether polyol.

10. The method of claim 9 wherein said at least one non-crystalline polyol comprises from about 10 to about 60% of a polyether, up to about 40% of an aromatic polyester, up to about 40% of an aliphatic polyester, and up to about 40% of a polybutadiene.

11. The method of claim 10 further comprising a crystalline polyester.

12. The method of claim 8 further comprising a non-functional acrylic.

13. The method of claim 12 which comprises up to about 50% of said non-functional acrylic.

14. The method of claim 8 wherein said functional acrylic polymer is a hydroxyl-functional polymer.

15. A method for bonding materials together which comprises applying the reactive hot melt adhesive composition of claim 1 in a liquid form to a first substrate, bringing a second substrate in contact with the composition applied to the first substrate, and subjecting the applied composition to conditions which will allow the composition to cool and cure to an irreversible solid form, said conditions comprising moisture.

16. The method of claim 15 wherein said at least one non-crystalline polyol is a polyether polyol.

17. The method of claim 16 wherein said at least one non-crystalline polyol comprises from about 10 to about 60% of a polyether, up to about 40% of an aromatic polyester, up to about 40% of an aliphatic polyester, and up to about 40% of a polybutadiene.

18. The method of claim 17 further comprising a crystalline polyester.

19. The method of claim 15 further comprising a non-functional acrylic.

20. The method of claim 19 which comprises up to about 50% of said non-functional acrylic.

21. The method of claim 15 wherein said functional acrylic polymer is a hydroxyl-functional polymer.

22. An article of manufacture comprising the adhesive of claim 1.